



Navy and Marine Corps Public Health Center "Quick Hits"



May 2011

NECE: Medical Entomology Update

The Navy Entomology Center of Excellence (NECE) is honored to be a key collaborator of the [Deployed War-Fighter Protection Research Program \(DWFP\)](#). DWFP is administered by the [Armed Forces Pest Management Board](#) and is funded at \$5M per year. DWFP research focuses on finding better methods and tools to protect our service members from insects that transmit disease. As the only entity in the DoD equipped to test and evaluate vector control equipment, NECE fulfills a much needed role within DWFP. In addition, NECE possesses a department solely dedicated to providing better means of operational vector control and protection of the War-Fighter.

NECE works closely with several world class partners on a wide variety of projects, both in the US and abroad, such as the [Center for Medical, Agricultural, and Veterinary Entomology](#) located at the University of Florida campus in Gainesville, FL, the [Centers for Disease Control and Prevention](#) in Atlanta, GA, and the USDA Agricultural Research Station in College Station, TX. All of these collaborations and projects have one end in mind: Force Health Protection.

The image shows the Deployed War-fighter Protection Research Program logo on the left, which features a globe with a map of the Americas and the text "ARMED FORCES PEST MANAGEMENT BOARD", "DWFP", and "WAR-FIGHTER PROTECTION". To the right of the logo are three smaller images: a helicopter on a runway, a military vehicle in a desert environment, and a close-up of a mosquito on skin.

NECE's Current Projects Include...

- Testing the integrity of pesticides under harsh environmental conditions.
- Increasing efficacy of pesticide applications under deployed settings.
- Controlling sand flies in desert and semi-tropical climates.
- Better measurements systems to ensure safe and accurate pesticide dispersal.
- Methods to protect service members from ticks in field operations.
- Identification of cutting-edge surveillance devices and repellents against vectors.
- Examining the effectiveness of different chemical compounds to control mosquitoes.
- Field trials of operational vector control equipment and pesticides.

Capturing and controlling the highly invasive, public health threat of the Asian Tiger Mosquito, *Aedes albopictus* which was implicated in a recent large scale epidemic of the viral disease chikungunya in Europe.

NECE participation in DWFP and with world-recognized experts in industry, academia, and federal agencies representing a variety of scientific and technical disciplines has resulted in many products that are already being used or on the way towards production. We will continue to focus on controlling vectors of disease until our toolbox has been filled with the most effective products, contributing to War-Fighter readiness and protection.

POC and Links

- NECE Homepage: http://www.nmcphc.med.navy.mil/field_activities/nece_overview.aspx
- NMCPHC Homepage: <http://www.nmcphc.med.navy.mil/>
- DFWP Homepage: <http://www.afpmb.org/content/deployed-war-fighter-protection-dwfp-program-overview-0>